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ABSTRACT

The methodology used in the evaluation of this unit is the same as that described in SO 000 433. The total number of students in the trial was about 2,100 seventh through twelfth grade students. The version of the unit used included nine activities, three of which were optional and designed to reinforce and supplement the required activities: 1) Political Territoriality; 2) Political and Administrative Districts of the City; 3) Scatter Diagrams of the Political Hierarchy and its Territorial Framework; 4) The Game Called "Section"; 5) The Location of the Massachusetts State Medical School; 6) Reapportionment and Gerrymander Exercise; 7) The United States-Canada Boundary Dispute; 8) The Changing Function of Boundaries in the European Common Market; and, 9) Designing a World Political Map. In conclusion, test results and student and teacher comments indicated that the subject matter of the unit was somewhat complicated for the majority of the students, and that it was too long. However, the role-playing activities were very well received (activity 4 and 7) indicating, in addition, that they would like more in this unit and the other units. The unit test, evaluation forms, and statistics are appended. See SO 000 433 for a list of the related reports. (SBE)

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POLITICAL PROCESSES:
Evaluation Report
From a Limited School Trial
of a Teaching Unit of the
High School Geography Project

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April 1967

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NOTE

The High School Geography Project is a course content improvement program in geography sponsored by the Association of American Geographers and supported by the National Science Foundation. The Project's goal is the development of new geography teaching materials at the tenth grade level. Current work is concentrated on development of materials following a course outline on a Settlement Theme.

Further information on the status and plans of the AAG project is available from:

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POLITICAL PROCESSES UNIT

SUMMARY OF RECOMMENDATIONS FOR REVISING THE UNIT

The following suggestions summarize the major points made in the body of the report:

(1) Both teachers and students expressed a great deal of interest in many aspects of the Political Processes unit. The two role playing activities were extremely well-received and evoked very favorable reactions from most teachers and students.

(2) Test results indicate that the activity on reapportionment and gerrymander was the most effective in meeting the objectives of the unit. However, most of the other activities were only somewhat effective in teaching students the basic concepts of political processes. Although some questions in the test were too specific and too advanced for the students, many others that dealt with important concepts in the unit were answered incorrectly by a substantial number of students. The unit test should be revised to suit the students' general vocabulary level, and aspects of the unit should be revised on the basis of the test results.

(3) The unit may be somewhat long, as well as somewhat complicated, for many classes. Its length may account in part for the relatively low mean posttest score of less than fifty percent, as students may find it difficult to remember things taught five and six weeks before the test is administered. Many teachers felt that the unit was trying to do too much and should be shortened.

(4) The readings are too advanced for the majority of the students, according to comments made by both students and teachers. The vocabulary and general level of the readings should be geared more to the average ninth or tenth grader. Readings should be more directly related to the subject matter of the activities. Many teachers also felt that directions for each written exercise should be included in the student materials.

(5) The teacher's guidelines were generally helpful to most of the teachers. However, teachers requested that suggestions that require some preparation be included in the preface rather than in the directions for the activities. Answers to all student problems and questions should be included in the guidelines.

DESCRIPTION OF THE LIMITED SCHOOL TRIALS

A. Purpose of Report

The evaluation report of the Political Processes unit is designed to serve two purposes. Of primary importance is the need to provide the unit authors and others responsible for the unit's revision with suggestions for modifying the unit. At the same time, statements about the unit's effectiveness are needed to assist in the development and revision of other units. It is hoped that this evaluation may be helpful in formulating materials which are even more effective in accomplishing the educational objectives of the High School Geography Project.

B. Background Information

The Political Processes unit is one of several units being developed by the High School Geography Project to constitute a geography course for high school students. The course is based on a settlement theme. During the spring of 1966 the unit was taught in Worcester, Massachusetts to about 275 students. On the basis of student and teacher reactions and test results designed to evaluate the unit's effectiveness, the unit was revised for the Limited School Trials.

The Limited School Trial of the Political Processes unit was held during the winter of 1966-67. It was the last of five units taught, following the Introduction, the Inside the City, the Networks of Cities, and the Manufacturing units.

C. Evaluation Instruments*

At the beginning of the trial the participating teachers administered the verbal sections of the Cooperative School and College Ability Test (SCAT), Form 3A, to estimate the verbal ability of the students in relation to other high school students. The teachers also administered a pretest in geography. There were four different forms of the pretest, each containing questions from the posttests of the five units in the Limited School Trials. Each form of the pretest was given to one-fourth of the trial students. Following the teaching of each unit, a unit test was administered to all of the students. A copy of the test for this particular unit is in Appendix D.

At the end of each unit, students and teachers filled out forms evaluating the effectiveness of the entire unit. Teacher evaluations are in Appendix A and student evaluations are in Appendix C. Teachers also completed forms evaluating the different parts of the unit, and their evaluations of the activities are in Appendix B. The suggestions for revising the unit that appear in this report are based on the results of the pretests, unit test, and the evaluation forms completed by teachers and students. Analysis of student reactions was based on a twenty percent sample of student questionnaires.

D. Description of Teachers

There were seventy teachers selected by the HSGP in the Limited School Trials. Twenty-five of the teachers were instructed by the HSGP in the use of materials and objectives of the course, and fifty teachers were given no instruction in the use of the materials for this unit. The seventy teachers were located in fourteen cities throughout the country. Fifty of the teachers taught in the West or Midwest.

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*The evaluation instruments used (except SCAT) can be found in the Appendices.

According to information obtained by the HSGP, the mean number of semester hours in geography of the seventy teachers was approximately fifteen, and the mean number of semester hours in history, sociology, economics, and other social sciences was approximately forty-nine. Almost sixty percent of the teachers had six or more years of teaching experience, although only thirty-five percent had been teaching geography for six years or more. Twenty of the teachers had majored in geography as either undergraduate or graduate students. Sixty-four of the seventy teachers taught the HSGP course in public schools, three taught in parochial schools, and three in independent schools.

E. Description of the Students

The total number of students in the trial of the Political Processes unit was about 2,100. Approximately sixty-one percent of the students were ninth graders, twenty percent were tenth graders, ten percent were twelfth graders, four percent were eleventh graders, and five percent were seventh or eighth graders. About half of the participating students came from schools with a total enrollment between 750 and 1,500.

Performance of the students on the verbal section of the Cooperative School and College Ability Test (SCAT) varied considerably according to grade level. The mean score of the students in the seventh and eighth grades indicates that these students were well above average in verbal ability, their mean score being equivalent to a position between the 82nd and 93rd percentiles for eighth grade SCAT norms. The majority of all students were in the ninth grade, and their mean score was also above average, being equivalent to a position between the 57th and 76th percentiles for ninth grade SCAT norms. The tenth, eleventh, and twelfth

graders were about average in verbal ability. The mean score of tenth graders was equivalent to a position between the 42nd and 62nd percentiles, the mean score of eleventh graders was between the 48th and 67th percentiles, and the mean score of twelfth graders was between the 45th and 68th percentiles.

The results of the verbal section of SCAT can be summarized as follows:

Grade	Number of students	Percentile rank according to appropriate grade norms
7 or 8	96	82-93
9	1,287	57-76
10	416	42-62
11	89	48-67
12	205	45-68

F. Description of the Unit

The Political Processes unit was prepared under the direction of Roger E. Kasperson. The version of the unit used in the 1966-67 trial included nine activities, three of which were optional and could be taught if class time permitted. Activities are defined to include all the identifiable and distinguishable educational experiences planned for the unit including class discussions, individual and group projects, and lectures. Each of the six essential activities was designed to introduce one or more of the basic concepts of the unit and the optional activities were designed to reinforce and supplement the required activities. Teaching of the six required activities was intended to require approximately twenty school class periods and teaching of the three optional activities was intended to require approximately thirteen additional days. The average number of days spent on the unit was twenty-nine days.

According to the introduction in the teacher's guidelines, the two major themes of the Political Processes unit are:

1. Any politically-organized group operates within a well-defined area known as a political territory.
2. There is a spatial structure to political organization and political processes.

The teacher was provided with guidelines that outlined the objectives and concepts of the unit. Each activity was described in terms of the major concepts to be taught, the materials needed, an estimated teaching time, and a suggested procedure to be followed in class. The guidelines also included background readings related to the concepts of the activity and intended for the teacher. Each student was provided with a manual of exercises and readings, some required and others optional. Students were also given self-check exercise cards for each activity as a means to check their own progress.

TEST RESULTS AND GENERAL IMPRESSIONS OF THE UNIT

A. Results of the Unit Test*

The following test results are based on the forty-two question unit test administered at the end of the Political Processes unit. These are compared with the results of the identical questions which were given before the unit began. A copy of the test appears in Appendix D.

The unit test of forty-two questions was designed to measure an understanding of the basic concepts taught in the unit. The unit test mean score was 20.2. Reliability was approximately .81. On the average, each of the forty-two questions pertaining to this unit was answered correctly on the pretest by thirty-two and one-half percent of the students, while on the unit test each question was answered correctly by forty-nine percent of the students. Thus, from the pretest to the unit test there was a mean increase of sixteen and one-half percent in the number of students answering the questions correctly. Over half of the teachers felt that the unit test adequately measured the content of the unit as they had taught it. However, over one-third of the teachers felt that the test was an inadequate measure of the unit, primarily because of the difficult vocabulary. Several teachers also felt that some of the questions required specific recall and were an unfair measure of a conceptual unit.

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*Three questions on the unit test, numbers 20, 21, and 28, were judged defective and are not included in the test analysis.

B. General Impressions of the Unit

The following observations about the Political Processes unit are based on the questionnaire filled out by teachers and students. Student impressions are based on a twenty percent sample (403) of student forms. From this sample, two groups, those who scored in the upper and lower quintiles on the verbal aptitude test, were isolated for comparison with the total sample.

Teacher impressions are based on the responses of teachers who completed the Teacher Unit Evaluation Form.

1. The Unit as a Whole

In general, both students and teachers thought that the unit was interesting and a valuable learning experience. Over half of the teachers felt that the greatest strength of the unit was its ability to actively involve a majority of the students in many of the activities. Many others commented that the subject matter was of great interest to the students and particularly relevant and timely. Others noted that the varied activities and unusual approaches to the material helped retain the interest of the many students. The self-check cards for each student were also welcomed as important reinforcements for the students, although some teachers felt that the inclusion of answers to the questions defeated the purpose of the cards.

Test results and student and teacher comments indicated that the subject matter of the unit is somewhat complicated for the majority of the students. The mean total score on the unit test was less than fifty percent of the questions answered correctly, and about forty percent of the teachers felt that the subject matter was too complicated whereas only one teacher felt that it was too simple for his students. About twenty percent of the teachers felt that the material would be more

appropriate for students in the eleventh or twelfth grades. And several teachers commented that they and their students were not convinced that the unit dealt with geographical concepts. These comments and the test results indicate a need for careful review of the unit's subject matter, with emphasis on simplifying it and making it more related to the other units in the course. Over ninety percent of the teachers felt that the subject matter was well-organized.

Many teachers felt that the greatest weakness of the unit was its length. Although most teachers had a sufficient amount of time to teach the unit, over one-fourth of them felt that the unit was trying to do too much and that one or more of the larger activities should be eliminated. Several teachers also felt that the role playing idea was overdone in this unit, and some teachers of eleventh and twelfth graders felt that games were ineffective teaching methods.

The role playing activities were very well received by both teachers and students. Activities 4 and 7, both of which involved students in roles, were thought to be the most effective activities in meeting the objectives of the unit by over half of the teachers; they were also found to be the most interesting activities by over sixty percent of the students. Many students indicated their enthusiasm for these activities by requesting more role playing activities in this and other units.

Over three-fourths of the students thought that the unit as a whole was either extremely or generally interesting. Students who scored in the lowest quintile on the verbal ability test indicated somewhat less interest in the unit (about two-thirds said it was interesting) than the other students.

2. The Student Reading Materials

Student and teacher comments indicate that the student reading materials in the Political Processes unit are too advanced and somewhat uninteresting for many students. Only three percent of the students found the readings to be extremely interesting, and less than half thought that they were generally interesting. When students were asked for suggestions for improving the unit about one-fourth of them criticized the readings in some way and asked that they be made more interesting and easier.

Teachers generally agreed that the readings were too advanced for their students. About ninety percent of the teachers felt that the readings were not clearly written for the below average student and about half felt that they were too advanced for the average student. The readings seem geared for the above average students as almost ninety percent of the teachers said they were appropriate at this level. In general, teachers felt that the primary difficulty was the advanced level of the vocabulary.

Over eighty percent of the teachers thought that the readings were well-organized from an instructor's point of view. The amount of student reading also seems generally appropriate although about one-fourth of the teachers suggested expanding the reading materials and about one-third of the teachers would like the amount of reading lessened.

The primary suggestion of teachers concerning the readings was the need for more material specifically related to the activities rather than supplemental or background readings. Many teachers also felt that the directions supplied for the students needed clarification and simplification and that each activity should include a set of directions in the student manual. Several teachers also suggested including a

group of simple questions at the end of each reading to highlight the main concepts for the students.

One teacher mentioned that his students were overwhelmed with the size of their text before they began the unit. He suggested taking out several sections in the manual, such as the newspaper accounts and tape transcripts of Activity 5, and distributing them at the appropriate time. This might alleviate the initial hostility of students that some teachers encountered.

3. Teacher's Guidelines

The teacher's guidelines were judged by teachers as being helpful in most respects in meeting their professional needs. About ninety percent felt that the guidelines were extremely or generally helpful in clarifying the objectives of the unit and in suggesting a variety of learning experiences. About three-fourths of the teachers found the guidelines helpful in providing needed geographical background, and about two-thirds of the teachers found them helpful in suggesting supplemental student readings. Teachers generally felt that the guidelines were most deficient in their lack of help in providing evaluation of student progress, with over half of the teachers suggesting additional help, possibly in the form of quizzes, in this area. Most of the teachers found the guidelines helpful, and suggestions for improving it were usually directed towards a clarification and expansion of some of the details and objectives of the activities.

SUGGESTIONS FOR REVISING THE UNIT

The Political Processes unit is divided into nine activities, each designed to develop an understanding of one or more of the unit's concepts. By relating each test question to one or more of the concepts, and thereby relating it to one of the activities of the unit, it is possible to analyze the extent to which students understand the concepts, as well as the extent to which each part contributes to this understanding. The evaluation of each activity will include a statement of the concept(s) it hoped to teach, a description of the activity, and results of the test questions pertaining to that activity. Test results will be reported in terms of the percent of students who correctly answered each question on the pretest versus the percent of these same students who correctly answered it on the unit test. This is followed by suggestions for revising the unit based on test results.

The discussions of the activities will also include general observations made by the teachers and unit evaluators with respect to the following: (a) whether the student and teacher directions were clear; (b) whether the activity was effective in stimulating the interest of the students; (c) whether the activity was effective in helping the students learn what was intended; (d) whether the activity should be retained in the unit with or without revision, or whether it should be eliminated. These judgments will be followed by specific suggestions for revising the activities, based on teacher and student impressions and comments.

Activity 1: Political Territoriality (forty-seven teachers reporting)

Activity 1 is designed to develop an understanding of the following concepts:

A. All governments and other political groups operate within a well-defined area known as their political territory.

B. Each individual lives within a number of political territories which are arranged in a political hierarchy.

Activity 1 consists of a discussion based on questions posed by the teacher to the class. The discussion is reinforced by a homework assignment of two required readings on territoriality and one optional reading on federalism.

The unit test contained five questions designed to measure the students' understanding of these concepts. The results of these questions and the concepts to which they are related are:

Question #	Concept	Pretest (% of Students Answering Correctly)	Posttest (% of Students Answering Correctly)	Increase in % of Students Answering Correctly
1	A	19	38	19
2	A	26	41	15
17	-	34	41	7
32	-	18	53	35
33	-	8	23	15
		M 21%	M 39%	M 18%

An average of twenty-one percent of the students correctly answered each of the five questions on the pretest (as compared with thirty-two and one-half percent for all questions). On the unit test, each question was correctly answered by an average of thirty-nine percent of these same students (as compared with forty-nine percent for all questions). Thus,

from the pretest to the unit test there was a mean increase of eighteen percent in the number of students correctly answering the questions related to Activity 1 (as compared with a mean increase of sixteen and one-half percent for all questions).

Since all but one of the questions related to Activity 1 was answered correctly on the unit test by less than half of the students, the discussion and readings do not seem to be doing sufficiently well in teaching the concepts of territoriality. Questions 32 and 33 require an understanding of the two required readings in the activity, and the results of these two questions suggest that readings are not sufficient by themselves to impart knowledge. Question 17 is indirectly related to a reading, and the results of this question substantiate the above idea. The results of questions 1 and 2 suggest that the discussion outlined in the activity has contributed to student understanding of the concepts, but that the majority of students are still unable to recognize examples of the principle of territoriality.

Almost ninety percent of the teachers felt that the directions in the guidelines were clear and almost eighty percent felt that the student materials were clear. Almost eighty percent felt that this activity was either generally or extremely effective in stimulating student interest and in helping students learn. About half of the teachers suggested retaining the activity without revision, forty percent would make changes in it, and two teachers would eliminate it from the unit.

Over half of the students thought that the activity was either generally or extremely interesting. However, fifteen percent of the students found it to be the least interesting activity in the unit.

Specific suggestions for improvements include:

1. Either eliminate Reading 3 on federalism or simplify it. Most teachers did not assign it because of its difficulty and fourteen teachers who had assigned it said that their students had found it too advanced.

2. Several teachers suggested that the readings and discussion be more closely related. The examples used in the discussion could be reinforced by a reading. As an example, the discussion of animal territoriality might make an interesting and worthwhile reading.

3. The questions outlined in the guidelines are somewhat complicated for many students. Students might be better prepared for a discussion if they were given the questions in their manual to review before class. A simple outline of the basic concepts could also aid students.

4. As the first activity in the unit, many teachers felt that it failed to stimulate or interest students. Both test results and reactions indicate that a more dynamic introduction to the topic of territoriality might be worthwhile.

Activity 2: Political and Administrative Districts of the City (forty-seven teachers reporting)

Activity 2 is designed to develop an understanding of the following concepts:

A. Within any political territory, there is a political hierarchy which has both a vertical and horizontal division of functions and power.

B. Reasons for the division of government into a political hierarchy include:

   1. accessibility
   2. awareness of and nearness to local problems
   3. centralization and decentralization of political power
   4. efficiency in administration

C. The arrangement of political and administrative districts within a city has profound implications for public policy and political processes.

Activity 2 consists of a set of transparency maps dealing with the political and administrative hierarchy of Boston, a homework assignment in which students design the arrangement of districts for the high schools of the hypothetical city of Machaug, and an optional exercise of transparencies that shows the political hierarchy in the Boston metropolitan area. The activity concludes with a homework assignment of readings from the student manual.

The unit test contained nine questions designed to measure the concepts taught in Activity 2. The results of these questions are:

Question #	Concept	Pretest (% of Students Answering Correctly)	Posttest (% of Students Answering Correctly)	Increase in % of Students Answering Correctly
3	A	27	57	30
16	A	30	52	22
36	A	17	30	13
4	B	44	60	16
18	B	34	48	14
19	B	23	46	23
5	C	18	22	4
6	C	17	27	10
37	C	67	78	11
		M 31%	M 47%	M 16%

An average of thirty-one percent of the students correctly answered each of the nine questions on the pretest (as compared with thirty-two and one-half percent for all questions). On the unit test, each

question was answered correctly by an average of forty-seven percent of these same students (as compared with forty-nine percent for all questions). Thus, from the pretest to the unit test there was a mean increase of sixteen percent in the number of students correctly answering the questions related to Activity 2 (as compared with a mean increase of sixteen and one-half percent for all questions).

The results of questions 3 and 16 indicate that the activity has contributed to students' understanding of political hierarchy, although many students are still unclear as to the application of this principle. Question 36 tests information that students should have acquired from readings, primarily from the optional reading in the activity, and the poor performance again suggests the need to emphasize important ideas in class as well as in readings.

Question 4 is a restatement of the activity's concept B. Although sixty percent of the students correctly identified the reasons for political hierarchies in government, additional emphasis of this basic concept may be desirable. Questions 18 and 19 deal with two reasons for the division of function: location and accessibility. The discussion of police districts in the activity involves both of these ideas, yet over half of the students incorrectly answered each question. In addition over one-fourth of the students said that police stations are not accessible to the public, a fact directly contrary to a basic idea in the activity.

Concept C also needs additional emphasis in the activity, as indicated by the results of questions 5 and 6. In question 5, just over one-fourth of the students knew that local governments rarely have common policies of taxation. Even more revealing is the fact that over one-third of the students thought that overlapping jurisdiction was not a

problem common to local governments. Question 6 tests students' understanding of the problems created by the location of school districts. Just over one-fourth of the students realized the desirability of combining economic and ethnic groups, while over half of the students thought that this combination would result in social conflict. This important point needs greater stress. The last question related to concept C, number 37, was correctly answered by over three-fourths of the students, although almost all of these were aware of the sewage problems of cities located on rivers before the unit was taught.

Almost eighty-five percent of the teachers thought that the directions in the guidelines were clear, although almost one-third felt that the student materials were incomplete. Many teachers suggested including the directions and questions in the student manual. About two-thirds of the teachers felt that the activity was generally or extremely effective in stimulating student interest and in helping students learn. About one-third of the teachers suggested retaining the activity without revision, almost two-thirds would change it somewhat, and three teachers suggested eliminating it.

Almost half of the students found the activity either extremely or generally interesting. About one-third thought that it was generally uninteresting, and about ten percent said it was dull. Approximately one-fourth of the students whose verbal ability scores were in the highest quintile found this activity the least interesting one in the unit.

Suggestions for improving the activity:

1. Complete directions for the Machaug map exercise should be included in the student materials. Eleven teachers noted that their students had difficulty drawing the boundaries on the map and that the symbols and legend were unclear. Students might do better with addi-

tional information about Machaug, such as the number of students, the amount of bus service, and the population densities.

2. Several teachers suggested adding color to the transparencies and map of Machaug.

3. Ten teachers mentioned that the readings were too advanced for their students and suggested that they be shortened or paraphrased for tenth graders.

4. One teacher suggested showing maps 2E and 2F of the Boston schools as the last ones in part A, so that they would directly precede the Machaug exercise.

5. One teacher suggested including a map of Boston in the student materials with historical and other sites indicated.

6. Place the suggestion to the teachers (on page 22 of the guidelines) in the preface so that they have time to obtain the maps.

Activity 3: Scatter Diagrams of the Political Hierarchy and its Territorial Framework (twenty-eight teachers reporting)

Activity 3 is an optional activity designed to reinforce the concepts of Activities 1 and 2 and to teach the following concepts:

A. The primary functions of each political unit vary according to the level in the political hierarchy.

B. The distribution of functions and power within the political hierarchy differ from place to place.

The activity centers around the construction of scatter diagrams relating levels of government to the functions they perform. The activity concludes with three required readings.

There were no questions on the unit test directly related to this activity. However, question 35 is related to the readings in both Activities 2 and 3; on the pretest seventeen percent of the students an-

swered it correctly and on the unit test fifteen percent answered it correctly. The question asks for recall of a specific fact about the abolition of the county system in Connecticut and tells little about the effectiveness of either activity.

About one-third of the teachers felt that the directions were unclear in some way, and about forty percent of the teachers suggested that the students be given directions for the activity. About half of the teachers felt that it was effective in helping students learn and in stimulating interest, whereas the other half felt that it was only somewhat effective or ineffective in these respects. About one-fourth of the teachers would retain the activity without revision, over half would make changes in it, and four teachers would eliminate it. Although fewer than half of the teachers used this activity in their classes, thirty percent of all teachers (and half of those who taught it) thought that it was the least effective activity in meeting the objectives of the unit.

About half of the students who were taught the activity thought that it was generally interesting. Almost twenty percent of these students (ten percent of all students) felt that it was the least interesting and the most difficult activity in the unit.

Suggestions for revising the activity:

1. Supply students with directions for completing the scatter diagrams, including clearer definitions and examples of general and specific functions.

2. Many teachers mentioned that the scatter diagrams did not form the desired pattern and that this led to a great deal of student confusion. One teacher suggested giving the students a list of contacts that they might make and having them check as each occurs. Several others suggested shortening the activity by eliminating the graphing.

3. One teacher noted that the diagrams for the overhead projector do not agree with page 56 of the guidelines.

Activity 4: The Game Called SECTION (forty-one teachers reporting)

Activity 4 is an optional educational game that introduces the idea that there is a spatial structure to political organization and political processes. According to the authors, the game "involves students in regional competion for the allocation of public funds in a hypothetical state, Midland." Each student assumes the role of an individual in the state. The game is intended to require about seven class days and most classes spent approximately this much time playing SECTION.

As an optional activity, there were no questions on the test directly related to Activity 4.

In general, both teachers and students felt that SECTION was a worthwhile and interesting activity. About eighty-five percent of the teachers felt that all the directions in the guidelines were clear, and about three-fourths of the teachers thought that the student directions were clear. Over three-fourths of the teachers thought that the activity was extremely effective in stimulating student interest, and all but three others felt that it was generally effective in this respect. Ninety percent of the teachers felt that SECTION was extremely or generally effective in helping students learn. Almost sixty percent would retain the activity without revision, one teacher would eliminate it, and the others would retain it with some revisions. Almost one-third of the teachers felt that it was the most effective activity in meeting the objectives of the unit.

Almost ninety percent of the students who played SECTION in their classes thought that it was extremely or generally interesting. Over one-fourth of all students (and over one-third of those students who

played the game) thought that the activity was the most interesting in the unit, and almost one-fifth of all students felt that it had taught them the most.

Specific suggestions for revising the activity:

1. In the guidelines, provisions should be made for classes with fewer or more students than the number of roles provided.

2. Some of the procedures for scoring created problems for several teachers. Teachers asked such questions as how to score if two sections combine for one proposal or if partial projects are agreed on. The scoring should be explained more fully, although five teachers suggested eliminating the scoring altogether.

3. Many teachers noted that their students had difficulty assuming and maintaining their roles. More complete biographical data on each individual and the inclusion of types of individuals that are more familiar to the average student might alleviate this problem. In general teachers felt the need of their students for more background material, both on the roles and on the sections of Midland. More specific suggestions about political tactics employed in legislatures could help keep students in their assumed roles.

4. Include a more detailed map of Midland, showing its road systems and the population of each section. As a transparency this map would aid class discussion.

5. Each of the following suggestions was made by one or more teachers: (a) Clarify the amount of money to be gained by certain projects, for example would five million dollars for a project be split between two areas or would each receive five million? (b) Suggest that classes use a tape recorder to play back budget proposals. (c) Expand and clarify instructions on pages 82-86 of the guidelines as several teachers

had questions on minor points. Suggest rules for hearings of the Executive Committee. (d) Explain whether students should use weighted votes for the Intra-Sectional negotiation on page 83 of the guidelines. (e) Include more projects for Centerville, like a park or a stadium.

6. Make provisions for keeping the residents of Midland busy when the budget is being drawn up, and for keeping the Executive Committee members busy when the sectional groups meet.

Activity 5: The Location of the Massachusetts State Medical School (forty-six teachers reporting)

Activity 5 is designed to develop an understanding of the following concepts:

A. Physical, cultural, and economic differences from place to place give rise to associated differences in political ideals and goals. These differences are reflected in the political behavior of people and their representatives.

B. The location of seats of government, public functions (e.g., military bases, airports, schools, and hospitals), and the awards of government contracts generate conflicts because the decision:
   (1) creates material rewards for people living in, or near, the location;
   (2) generates support among constituents for politicians successful in influencing the decision;
   (3) has symbolic value for underlying conflicts already existing between areas (e.g., rural-urban hostility).

Activity 5 consists of a discussion of either the dispute over the location of the Massachusetts Medical School or a dispute in the students' local area for which the teacher must provide the materials. For the former option, the class is provided with a tape recording of an inter-

view with a politician, newspaper clippings, maps, and photographs. The discussion ends with a vote as to the best site to locate the school. The activity concludes with a homework assignment of a reading in the student manual.

The unit test contained eight questions designed to measure the concepts of Activity 5. The results of these questions are:

Question #	Concept	Pretest (% of Students Answering Correctly)	Posttest (% of Students Answering Correctly)	Increase in % of Students Answering Correctly
23	A	57	58	1
7	A & B	65	83	18
8	B	18	36	18
9	B	13	20	7
10	B	26	56	30
34	B	29	39	10
38	B	23	36	13
22	-	15	33	18
		M 31%	M 45%	M 14%

An average of thirty-one percent of the students correctly answered each of the fourteen questions on the pretest (as compared with thirty-two and one-half percent for all questions). On the unit test, each question was correctly answered by an average of forty-five percent of these same students (as compared with forty-nine percent for all questions). Thus, from the pretest to the unit test, there was a mean increase of fourteen percent in the number of students correctly answering the questions related to Activity 5 (as compared with sixteen and one-half percent for all questions).

The results indicate that Activity 5 (as well as Activity 4 which deals indirectly with these concepts) has contributed to students' understanding of the structure of political processes, although many of the ideas intended to be taught need additional emphasis in these activities.

Questions 8 and 10 measure ideas that are specifically discussed in Activity 5. However, only thirty-six percent of the students knew that elected representatives should determine the sites of public functions, while as many students thought that this decision should be made by government planners. In question 10, over half of the students realized that a city would benefit from a new school by an increase in retail sales, but about one-fourth of the students thought that the result of a new school would be an increase in medical care costs. Results of both questions clearly indicate that basic concepts of the activity have not been understood by substantial numbers of students. Question 7, correctly answered by over eighty percent of the students, indicates students' general understanding of the concerns of political geographers.

The results of the remaining five questions point up areas that deserve added stress in the unit, including the affects of regional differences on political decisions, the benefits to a politician for influencing a favorable decision, and the likely causes of political disputes. Question 22 tests an understanding of the reading on Brazil and again indicates the need to stress important ideas in class activities as well as in student readings.

About eighty-five percent of the teachers felt that the directions in the guidelines and in the student materials were clear. About three-fourths of the teachers thought that the activity was either generally or extremely effective in stimulating student interest and in helping students learn. About one-third would retain the activity without

revision, about two-thirds would make certain changes in it, and three teachers suggested eliminating it. About ten percent of the teachers felt that it was the most effective activity in meeting the unit's objectives, while another ten percent thought that it was the least effective activity in this respect.

Almost two-thirds of the students found the activity to be either extremely or generally interesting.

Specific suggestions for revision:

1. Eight teachers suggested giving the students more directions for using the materials, as well as questions to highlight the major points in the articles and tape.

2. Seven teachers mentioned that by telling students that Worcester was awarded the location, the class discussion became anticlimactic. Another teacher suggested concealing the recommendations of the Dean and the consulting firms so that the students could make the decision on the basis of the true virtues of each location.

3. Five teachers felt that there was too much material on Worcester and not enough on the other three cities.

4. The reactions to the tape recording varied, but in general those who commented on it felt that it had bored, rather than stimulated, the students. Most of these teachers felt that the tape was too long and that it did not contain enough relevant information to make it worthwhile. One teacher thought that a tape of a final session of the Trustees might be more profitable.

5. Clarify the following: (a) The vote of the Board of Trustees in June of 1965 is recorded as twelve to eleven on page 109 of the student materials and as twelve to ten on pages 117 and 121. (b) In Part C, may students vote for the city they represented?

6. For class discussion provide a transparency of figure 5A, including sites of existing medical schools.

7. One teacher suggested revising the procedure by first dividing the class into four groups, asking each to research the advantages and disadvantages of locating in one of the cities. The tape could then be played and used as a focal point to a discussion and vote on the best location.

8. Another teacher suggested making Activity 5 an extension of the game of SECTION. The four sections of Midland could be the four possible sites for the medical school.

9. The team competition is repetitious of questions 1 and 2 in Part B, and one or the other could be eliminated.

Activity 6: Reapportionment and Gerrymander Exercise (forty-five teachers reporting)

Activity 6 is designed to develop an understanding of the following concepts:

A. The arrangement of election districts influences election results and behavior of the elective body.

B. The degree of political representation of any people often differs from place to place and over time.

The activity consists of two exercises in which students analyze the influence of the arrangement of election districts on the political process. In an exercise on reapportionment and one on gerrymandering students solve the problem of explaining the divergence between the popular vote and the representatives elected. The activity concludes with a homework assignment of four readings.

The unit test contained nine questions designed to measure the concepts of reapportionment and gerrymandering. The results of these questions are:

Question #	Concept	Pretest (% of Students Answering Correctly)	Posttest (% of Students Answering Correctly)	Increase in % of Students Answering Correctly
11	A	49	68	19
12	A	43	57	14
13	A	26	82	56
14	A	49	69	20
25	A	40	61	21
39	A	18	47	29
26	A & B	47	60	13
27	A & B	27	45	18
40	B	46	65	19
		M 38%	M 61%	M 23%

An average of thirty-eight percent of the students correctly answered each of the nine questions on the pretest (as compared with thirty-two and one-half percent for all questions). On the unit test, each question was correctly answered by an average of sixty-one percent of these same students (as compared with forty-nine percent for all questions). Thus, from the pretest to the unit test, there was a mean increase of twenty-three percent in the number of students correctly answering the questions related to Activity 6 (as compared with sixteen and one-half percent for all questions).

The students' performance on these questions was better than that on any other group of questions, and the results indicate that Activity 6 has contributed much to students' understanding and awareness of reapportionment and gerrymandering. Over eighty percent of the students knew the definition of gerrymander (question 13), and in most cases a majority of students were able to apply this definition and concept to novel situations.

About three-fourths of the teachers felt that the student and teacher directions were clear. Over eighty percent of the teachers felt that the activity was effective in stimulating student interest, and over two-thirds felt that it effectively helped students learn. Over one-third suggested retaining the activity without revision, about half would make certain changes in it, and two teachers would eliminate it. Although ten percent of the teachers felt that it was the most effective activity in meeting the unit's objectives, another thirteen percent felt that it was the least effective.

About two-thirds of the students who were taught the activity found it to be either extremely or generally interesting. Almost one-fifth of the students thought that Activity 6 had taught them the most and was also the most difficult one in the unit.

Suggestions for improving the activity:

1. Twenty-three teachers mentioned that the math in the activity had presented problems to the majority of their students. Some of them felt that the math could be greatly simplified or almost totally eliminated. Others suggested including directions in the student manual. One felt that by using smaller numbers, fewer districts, and greater shifts in population the concept could be taught without the use of a formula, possibly by the use of a color code to show the shifts in population.

2. Provide teachers with the correct answers in the reapportionment exercise: i.e., the correct index number and the number of representatives for each district.

3. On page 200 of the guidelines, the Democrats would gain two seats in the legislature if L and O were combined, not the Republicans.

4. Provide transparencies of pages 203-206, or suggest that teachers make these.

5. Teachers made the following suggestions for presenting the problem in a more interesting manner:

a. Use the student government as a model for a state legislature, and see how well each class, or grade, is represented on the student council.

b. Expand the game of SECTION to include these problems by seeing how well each section of Midland is represented on a hypothetical state legislature.

c. Divide Activity 6 into two separate activities or two very distinct parts so that students do not confuse gerrymandering and reapportionment.

Activity 7: The United States-Canada Boundary Dispute (forty-two teachers reporting)

Activity 7 is designed to develop an understanding of the following concepts:

A. Boundaries, the limits of political territory, interrupt the movement of peoples, goods, information, and ideas between places.

B. Different reasons may be used to justify a state's claim to a disputed territory. Types of justification include

(1) legal-historical

(2) economic

(3) ethnic-language

(4) strategical

C. Most boundary disputes are settled through a process of compromise and accommodation.

Activity 7 presents a hypothetical boundary dispute between the United States and Canada in which students assume the roles of individuals involved in the dispute. Students face the same problem

learn to settle these problems in the way the statesman or geographer would. The activity concludes with a discussion of the concepts learned and a homework reading assignment.

The unit test contained eight questions designed to measure the concepts listed above. The results of these questions are:

Question #	Concept	Pretest (% of Students Answering Correctly)	Posttest (% of Students Answering Correctly)	Increase in % of Students Answering Correctly
15	A	47	49	2
24	A	28	41	13
30	A	45	70	25
31	A	40	47	7
41	A	23	36	13
42	A	29	31	2
44	-	19	56	37
29	C	57	77	20
		M 36%	M 51%	M 15%

An average of thirty-six percent of the students correctly answered each of the eight questions on the pretest (as compared with thirty-two and one-half percent for all questions). On the unit test, each question was answered correctly by an average of fifty-one percent of these same students (as compared with forty-nine percent for all questions). Thus, from the pretest to the unit test there was a mean increase of fifteen percent in the number of students correctly answering the questions related to Activity 7 (as compared with sixteen and one-half percent for all questions).

Questions 29, 30, and 44 show substantial increases in the number of students correctly answering them and indicate that most students

have learned the role of compromise and arbitration, the likely boundaries of countries, and the participants in the hypothetical dispute (question 44). The results to the latter question, however, may indicate that many classes did not adequately cover the activity, since almost half of the students failed to recognize the participants in the dispute.

The results to the other questions indicate areas that the activity has failed to adequately teach. Question 24 restates one of the basic concepts of the activity, and yet over half of the students thought that boundaries increase trade between countries. Answers to questions 31 and 41 can be found in the assigned reading, as well as in the activity, and the results show either students' lack of comprehension or lack of reading. Neither has the activity contributed to students' ability to answer questions 15 and 42, both of which require application of the concepts.

Approximately two-thirds of the teachers felt that all the directions for the activity in the guidelines and student manual were clear. Over eighty percent of the teachers thought that the activity was extremely or generally effective in stimulating student interest, although less than two-thirds of them thought that it was as effective in helping students learn what was intended. About one-third of the teachers suggested retaining the activity without revisions, over half would make certain changes, and about ten percent would eliminate it. Over one-fourth of the teachers thought that Activity 7 was one of the most effective activities in meeting the unit's objectives.

Students generally found this activity very interesting, expressing about the same level of interest as in the game of SECTION, the other role playing activity taught in the unit. Over eighty percent of

those students who were taught Activity 7 found it either extremely or generally interesting. About one-third of all students thought that it was the most interesting activity in the unit, and over one-fifth of the students thought that it had taught them the most. Both teachers and students seem to have overestimated this activity's effectiveness in helping students learn.

Suggestions for revising activity:

1. About ten teachers felt that the student directions were insufficient. In particular, teachers felt that the students should be given a list of duties of the student political moderator, a clear list of the functions of the Arbitration Committee and the International Joint Commission, and a complete list of each group's responsibilities. Teachers felt that such additions would help students prepare for class and thus would limit the amount of wasted class time.

2. Provide a greater number of roles for classes with many students and suggest ways of reducing the number of roles for classes with few students. Also some felt that the roles were too sketchy and should be enlarged.

3. Suggest that each student introduce himself in his role to the rest of the class before the negotiations begin.

4. Clarify the following points, each of which was questioned by one or more teacher:

   a. What is meant on page 213 of the guidelines by "negotiations should be carried on as homework"?

   b. What is the gold company supposed to negotiate?

   c. Are disputed area inhabitants the ones who play scenes on page 215 of guidelines?

   d. What is the role of France and is France supposed to be objective?

5. Include a scale on all maps used.

Activity 8: The Changing Function of Boundaries in the European Common Market (twenty-one teachers reporting)

Activity 8 is an optional activity designed to reinforce the concepts taught in Activity 7. The activity focuses on international political organization in exploring the geographical changes generated by alteration of the functions of boundaries. The activity consists of a film, "Mr. Europe and the Common Market," a reading, and map exercises to determine the economic effect of tariff reductions on boundaries in the Common Market.

There were no questions on the unit test directly related to this optional activity.

About eighty percent of the teachers felt that all of the directions in the guidelines were clear, and almost three-fourths of the teachers thought that the student materials were clear, although some felt that students should be given directions for completing the exercises. About three-fourths of the teachers thought that the activity was generally or extremely effective in stimulating student interest and in helping students learn. Over one-third of the teachers suggested retaining the activity without revision, almost half would make certain changes in it, and two teachers suggested eliminating it.

Almost half of the students did not evaluate this activity. But almost sixty percent of those who did evaluate it found it either generally or extremely interesting. On the other hand, sixteen percent of all students (which is about one-fourth of those students who were taught the activity) felt that it was the least interesting activity in the unit.

Suggestions for revision:

1. Several teachers mentioned difficulty their students had in assigning values to the arrows as required on page 257 of the guidelines.

2. Four teachers noted that the reading for this activity was especially advanced for the majority of the students.

3. One teacher thought that the transparencies provided were inaccurate, specifically the width of the bars and the fact that Belgium and Luxemburg were combined in the text and separated in the transparency.

4. The following suggestions for simplifying the activity were made:

   a. Include a bar graph to illustrate increased trade on pages 242 and 243.

   b. Provide a colored transparency of the Common Market countries.

   c. Include a blank map of Europe on which students can locate countries.

   d. Simplify the explanation of tariffs and include visual representations of the concepts in cartoon or film form.

   e. Suggest that students build a bar graph before constructing the maps.

   f. Provide sample questions for page 257, paragraph 2.

   g. Include a sample bar graph in the student manual.

Activity 9: Designing a World Political Map (thirty teachers reporting)

Activity 9 is designed to develop an understanding of the following concepts:

A. The nations of the world vary in their social, economic, and political characteristics. Nations with similar characteristics and problems may be grouped together.

B. The social, economic, and political characteristics of a nation affect its position and participation in international politics.

Activity 9 involves each student in creating a world political map based either on characteristics of his own choosing or on such classifications as those suggested in the guidelines: orientation of foreign policy, status of political sovereignty, type of government, or economic characteristics. The activity includes reading a separate booklet entitled "Profiles of the Third World" provided for the more advanced students.

The unit test contained two questions designed to measure the concepts listed above. The results of these questions are:

Question #	Concept	Pretest (% of Students Answering Correctly)	Posttest(% of Students Answering Correctly)	Increase in % of Students Answering Correctly
43	-	56	64	8
45	-	40	47	7

Both questions deal with aspects of the activity rather than with the concepts hoped to be taught by it. Therefore little can be said about the effectiveness of this type of activity.

Over eighty percent of the teachers thought that the directions in the guidelines and student materials were clear. About two-thirds of the teachers felt that the activity was generally or extremely effective in stimulating student interest and in helping students learn. About forty percent of the teachers suggested retaining the activity without revisions, about the same number would make certain changes, and two teachers suggested eliminating it.

About one-third of the students did not evaluate the activity. However, about two-thirds of those students who did evaluate it found it to

be either generally or extremely interesting. It was also considered to be one of the more difficult activities, with about one-fifth of those students whose verbal ability scores were highest said that it was the most difficult activity in the unit.

In general, teachers and students felt that the activity was too difficult, and the following suggestions are aimed at trying to simplify the activity.

1. Provide students with specific directions for completing their maps and with suggestions for locating the required information, if not the information itself.

2. Supply the teacher with additional suggestions for designing the maps, and define more fully what is meant by "characteristic."

3. Include a sample map for the students or begin a map and have the students complete it.

4. Simplify the readings; make the pamphlet about the third world available for all students in a simplified version.

Final Note

The work reported here is only one portion of the effort to test in the classroom the units being developed by the High School Geography Project. It seems important, considering the difficulty of the task of evaluation, to comment briefly about the uses of the data and suggestions that are appropriate.

First, it should be possible to revise, expand, and rewrite certain portions of the student materials.

Secondly, it should be possible to improve the test instrument so that eventual use of the items by classroom teachers may be more helpful.

And finally, it should be possible now to design and execute a much larger study of the usefulness, appropriate student populations for the unit work, and results to be expected from use of the materials.

The classroom trial of this unit has partially set the stage for the fruitful investigation, with a representative sample of schools, of the HSGP Settlement Theme course. Therefore, we end our report with a note calling for that research and investigation as the materials become available.

APPENDICES

APPENDIX A

TEACHER EVALUATIONS OF THE POLITICAL PROCESSES UNIT
(% of teachers responding)
(N=48)

		Yes	No	Omit
A.	**Reading Materials**			
1.	Do you believe the reading materials are clearly written and understandable for the average student?	52	42	6
2.	Do you believe the reading materials are clearly written and understandable for the above average student?	88	10	2
3.	Do you believe the reading materials are clearly written and understandable for the below average student?	6	90	4
4.	Do you believe the reading materials are well-organized from an instructor's point of view?	83	17	0
5.	Should there be more student reading in the unit?	23	77	0
6.	Should there be less student reading in the unit?	33	65	2
B.	**The Subject Matter in the Unit**			
7.	Is the subject matter of the unit too complicated for students?	40	60	0
8.	Is the subject matter of the unit too simple for students?	2	98	0

9. How would you rate the manner in which the subject matter is organized?

   21 Excellent 72 Generally good 6 Somewhat poor
   2 Definitely poor 0 Omit

C. **Teacher's Guidelines**

How helpful were the teacher's guidelines in

10. Clarifying the objectives of the unit?

    37 Very helpful 56 Generally helpful 4 Somewhat inadequate
    0 Definitely inadequate 2 Omit

11. Suggesting a variety of learning activities?

    35 Very helpful 54 Generally helpful 4 Somewhat inadequate
    2 Definitely inadequate 4 Omit

12. Providing needed geographical background, including suggested reference books?

42 Very helpful 35 Generally helpful 19 Somewhat inadequate
2 Definitely inadequate 2 Omit

13. Suggesting supplementary reading materials for students?

12 Very helpful 55 Generally helpful 29 Somewhat inadequate
2 Definitely inadequate 2 Omit

14. Providing guidelines for continuous evaluation of student progress?

12 Very helpful 31 Generally helpful 42 Somewhat inadequate
12 Definitely inadequate 2 Omit

D. The Unit as a Whole	Yes	No	Omit
15. Did the unit test adequately measure the content of the unit as you taught it?	54	37	8

16. Which activity was MOST effective in meeting the objectives of the unit?

Activity 1 - 6	Activity 6 - 10	1, 2, & 3 - 2
2 - 2	7 - 22	4 & 5 - 2
3 - 0	8 - 4	4 & 7 - 2
4 - 30	9 - 2	7 & 9 - 2
5 - 10		Omit - 6

17. Which activity was LEAST effective in meeting the objectives of the unit?

Activity 1 - 6	Activity 6 - 13	1, 2, & 3 - 2
2 - 4	7 - 6	3 & 6 - 2
3 - 30	8 - 2	4 & 5 - 2
4 - 2	9 - 6	4 & 7 - 2
5 - 10		None - 2
		Omit - 10

18. Teachers were to indicate their judgment about the degree of interest each activity had for the majority of students. In the column at the far right each activity was rated as follows: A essential to the unit; B could be made optional; C should be dropped or significantly revised. Only 46 teachers completed this part of the evaluation form. The percentage of the 46 teachers who responded in the indicated way is recorded.

Activity	Omit	Extremely Interesting	Generally Interesting	Generally Uninteresting	Dull	Rating	Omit
1	2	17	66	15	0	A-57 B-11 C-11	21
2	0	17	55	24	4	A-46 B-15 C-17	21
3	26	4	22	26	22	A-13 B-26 C-24	37
4	11	59	19	4	6	A-55 B-11 C- 6	28
5	11	26	48	6	9	A-39 B-24 C-13	24
6	2	33	53	6	6	A-50 B-13 C-15	21
7	11	39	35	13	2	A-41 B-15 C-15	29
8	33	13	39	11	4	A-30 B-15 C- 9	45
9	31	13	42	13	2	A-35 B-15 C- 9	41

APPENDIX B*

TEACHER EVALUATIONS OF THE POLITICAL PROCESSES UNIT ACTIVITIES (CHART I)

Activity #	# of Teachers Reporting	Mean # of Class Minutes Spent on Activity	% Suggesting More Time for Activity	% Thinking Teacher's Guide Directions Clear		% Thinking Student Directions Clear	
				YES	NO	YES	NO
1	47	100	13	87	13	78	15
2	47	165	11	85	15	66	33
3	28	155	4	64	32	53	40
4	41	320	12	85	15	76	22
5	46	170	24	85	15	85	9
6	45	180	22	76	22	76	18
7	42	240	26	69	31	65	33
8	21	150	10	80	10	72	23
9	30	115	27	83	14	83	14

*Appendix B is based on teacher responses to questions in the Teacher Activity Evaluation Form. The percentage of teachers who responded to each question in one of the specified ways is indicated.

TEACHER EVALUATIONS OF THE POLITICAL PROCESSES UNIT ACTIVITIES (CHART II)
(% of teachers responding)

Activity	Effectiveness in Stimulating Student Interest				Effectiveness in Helping Students Learn What Was Intended				Opinion on Whether Activity Should be Retained in Unit				Number of Teachers Reporting
	Very Effective	Generally Effective	Generally Ineffective	Definitely Ineffective	Very Effective	Generally Effective	Generally Ineffective	Definitely Ineffective	Yes, Without Revision	Yes, With Revision	No	Omit	
1	17	62	17	4	20	59	15	6	52	40	47	4	47
2	6	60	25	9	9	52	33	6	32	60	6	2	47
3	11	32	40	17	7	46	36	11	25	57	14	4	28
4	78	15	5	2	65	25	8	2	59	39	2	0	41
5	24	50	24	2	20	52	24	4	30	63	7	0	46
6	35	47	18	0	18	51	29	2	38	54	4	4	45
7	43	38	14	5	31	33	29	7	31	57	10	2	42
8	19	62	14	0	14	57	19	0	38	47	10	5	21
9	17	50	30	0	17	47	33	0	40	43	7	10	30

APPENDIX C

STUDENT EVALUATIONS OF THE POLITICAL PROCESSES UNIT ACTIVITIES (CHART I)*
(% of students having opinion)

Omit or Did Not Remember				Activity	Extremely Interesting				Generally Interesting				Generally Uninteresting				Dull			
High	Middle	Low	Total		High	Middle	Low	Total	High	Middle	Low	Total	High	Middle	Low	Total	High	Middle	Low	Total
2	3	8	4	Unit as a whole	11	10	13	11	65	71	54	66	16	12	15	13	6	4	10	6
6	2	8	4	Reading materials	2	3	5	3	49	53	40	49	33	30	26	31	9	12	22	13
10	4	12	7	1	6	8	20	10	47	52	35	48	28	28	23	28	8	8	9	8
8	10	14	11	2	6	6	7	6	42	45	35	43	33	30	26	30	10	10	17	11
31	34	26	32	3	5	3	3	3	22	30	35	30	30	22	19	24	12	10	18	12
28	14	34	21	4	37	38	24	36	25	38	29	34	7	6	10	7	2	3	4	3
4	5	20	17	5	17	16	20	17	54	47	39	47	21	22	14	21	5	8	8	7
7	8	21	10	6	9	13	15	13	56	48	28	46	18	22	23	22	9	8	14	10
23	14	14	17	7	30	41	20	34	36	33	51	37	5	8	12	8	6	3	4	4
46	42	54	45	8	9	4	8	6	19	30	17	26	16	14	17	15	9	10	5	9
45	34	32	36	9	6	10	13	10	26	34	27	32	13	13	21	15	9	8	8	8

*Student evaluations are based on response of a 20% random sample of papers (403 students). Students were to indicate their degree of interest in each activity listed. The middle column lists the percentages of the 242 students who scored in the middle 60% on SCAT. The high and low columns list the responses of the sample students who scored in the high and low quintiles on SCAT, 83 and 78 students respectively.

APPENDIX C

STUDENT EVALUATIONS OF THE POLITICAL PROCESSES UNIT ACTIVITIES (CHART II)*

Activity	% of Students Who Found It MOST INTERESTING				% of Students Who Found It LEAST INTERESTING				% of Students Who Found It Taught Them The MOST				% of Students Who Found It MOST DIFFICULT			
	High	Middle	Low	Total	High	Middle	Low	Total	High	Middle	Low	Total	High	Middle	Low	Total
1	6	4	6	5	17	15	13	15	7	4	12	6	8	8	4	7
2	1	3	2	3	24	10	12	13	2	5	6	5	6	11	15	12
3	1	2	4	2	10	10	9	10	0	2	1	2	5	10	12	10
4	34	30	20	29	4	2	6	3	18	19	15	18	7	14	8	15
5	5	10	12	10	10	14	14	13	12	11	15	12	12	10	4	9
6	13	8	12	8	17	12	8	10	21	20	6	18	20	21	12	19
7	27	36	29	32	6	3	6	4	17	25	17	22	5	4	9	5
8	6	2	5	4	16	19	6	16	6	7	4	6	10	9	4	8
9	5	2	8	4	6	9	9	8	8	3	8	5	18	9	10	11
Omit	2	2	13	4	1	6	17	7	8	3	16	7	10	13	21	13

*Student evaluations are based on responses of a 20% random sample of papers (403 students). The middle column lists the percentages of the 242 students who scored in the middle 60% on SCAT. The high and low columns list the responses of the sample students who scored in the high and low quintiles on SCAT, 83 and 78 students respectively.

APPENDIX D

FORM PHS

POLITICAL PROCESSES UNIT TEST

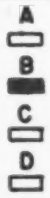
Time—40 minutes

YOU ARE TO INDICATE ALL YOUR ANSWERS ON THE SEPARATE ANSWER SHEET. No credit will be given for anything written in the test book. After you have decided which of the suggested answers you want to give for a question, blacken the corresponding space on the answer sheet.

Example:

Chicago is a
(A) state
(B) city
(C) country
(D) continent

Sample Answer



Give only one answer to each question; no credit will be given for multiple answers. If you wish to change an answer, erase your first line completely and mark your new choice.

DO NOT OPEN THIS BOOK UNTIL YOU ARE TOLD TO DO SO.

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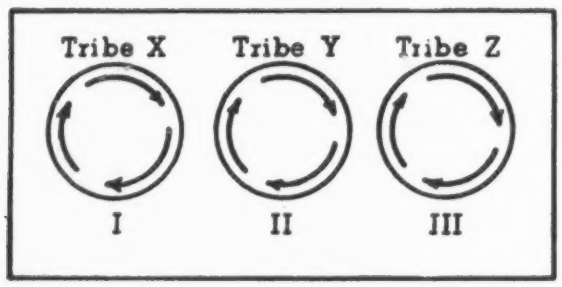
Time--40 minutes

Directions: Each of the questions or incomplete statements below is followed by four suggested answers or completions. Select the one which is best in each case and then blacken the corresponding space on the answer sheet.



1. The arrows in the diagram above represent the seasonal movements of three tribes, X, Y, and Z, within areas I, II, and III of an African country. Which of the following principles of political geography is best illustrated by this diagram?

   (A) Tribes occupy well-defined territories upon which other tribes do not trespass.
   (B) There is a constant possibility of warfare among tribes that are always on the move.
   (C) Nomadic tribes are unable to develop sound economic and political institutions.
   (D) Nomadic tribes tend to move in similar cycles.

2. Which of the following is LEAST representative of the principle of territoriality?

   (A) A feudal manor
   (B) A juvenile gang
   (C) The National Football League
   (D) The International Red Cross

3. "A political hierarchy is characterized by both a vertical and a horizontal division of power."

   To which of the following relationships can the term "political hierarchy" refer?

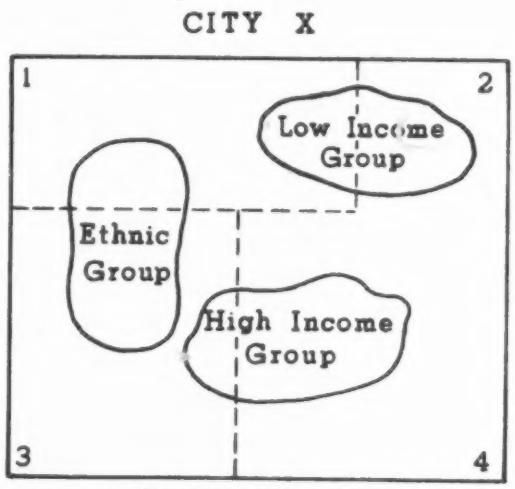
   (A) Governmental services and taxes
   (B) The national government and state governments
   (C) The President and the Congress
   (D) Voting and political parties

4. Which of the following is NOT an important reason for the division of government into different administrative levels?

   (A) Accessibility of government to citizens
   (B) Government awareness of local problems
   (C) Efficiency in administration
   (D) Communication among government personnel

5. In most metropolitan areas, local governments are LEAST likely to have

   (A) common economic problems
   (B) overlapping jurisdiction
   (C) political conflict with central cities
   (D) common policies of taxation



6. The division of City X into four school districts, as shown above, will most likely result in

   (A) poorer education for all students
   (B) social conflicts among groups
   (C) increased communication among groups
   (D) the need to transport students from the suburbs

7. A political geographer would be most likely to be concerned with disputes over the

   (A) arrangements of political districts
   (B) relations between the President and Congress
   (C) establishment of tax rates
   (D) effects of climate upon election results

8. The location of public functions, such as airports, schools, or hospitals, should be determined by

   (A) elected representatives
   (B) courts of law
   (C) government planners
   (D) groups of interested citizens

GO ON TO THE NEXT PAGE.

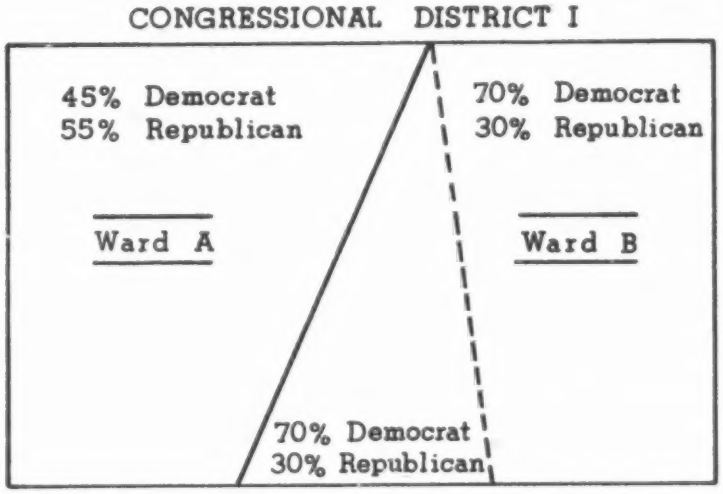
9. Which of the following is LEAST likely to influence political decisions?

(A) Television documentaries
(B) Regional differences
(C) Public opinion polls
(D) Newspaper editorials

10. City X is selected as the site for a new state medical school. The most probable result would be

(A) a decrease in per capita income
(B) a decrease in population
(C) an increase in retail sales
(D) an increase in costs for medical care

Questions 11-12



11. In Congressional District I, a shift in population requires a change in the ward boundaries. If the proposed boundary change shown in the diagram is adopted, which of the following would probably be pleased with the change?

(A) The Republican party
(B) The Democratic party
(C) Both the Republican and Democratic parties
(D) Neither the Republican nor the Democratic party

12. If the boundary change shown in the diagram is adopted, all of the following will happen EXCEPT

(A) the population of Ward A will increase
(B) the area of Ward A will decrease
(C) Democrats will remain in the majority in Ward B
(D) the number of Democrats in Ward B will decrease

13. Redrawing the boundaries of an election district in order to give unfair advantage to one political party is known as

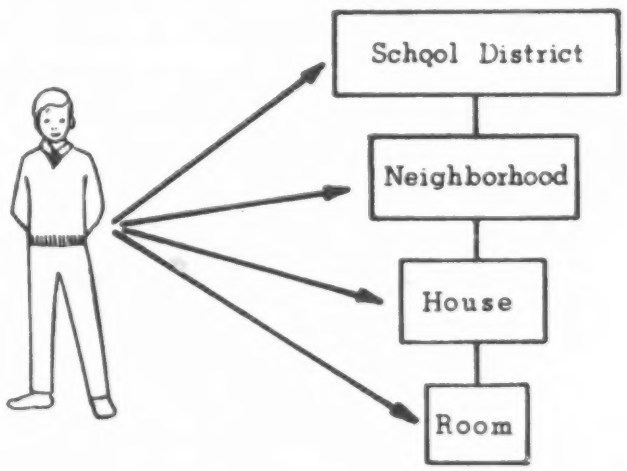
(A) logrolling (B) gerrymandering
(C) reapportionment (D) patronage

14. In the United States, political boundaries are changed most often in order to

(A) increase the movement of people from place to place
(B) make transportation routes more efficient
(C) discourage integration of neighborhoods
(D) shift concentrations of voters

15. Which of the following would be most likely to occur if the boundary between Wisconsin and Illinois were suddenly closed?

(A) Workers would migrate from Illinois.
(B) The dairy industry in Wisconsin would lose part of its market.
(C) Wisconsin would develop its resource base.
(D) The per capita income of Illinois would decline.



16. Which of the following concepts are illustrated in the diagram above?

I. Change in scale
II. Accessibility
III. Territoriality
IV. Hierarchy

(A) I and II only (B) II and IV only
(C) I, III, and IV only (D) I, II, III, and IV

GO ON TO THE NEXT PAGE.

17. If groups within a nation stress their own political territorialities, which of the following is LEAST likely to occur?

(A) Partition (B) Federalism
(C) Regional competition (D) Centralization

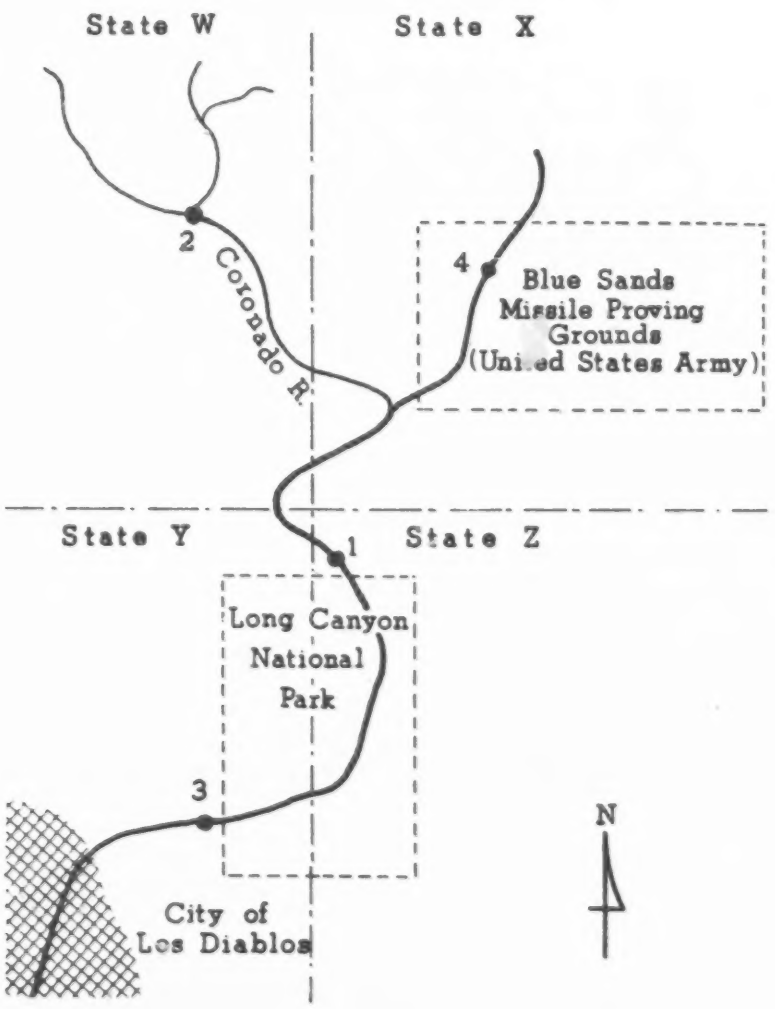
18. The boundaries of political districts within a city often differ because

(A) many cities lack planning agencies
(B) each district follows the natural division of the land
(C) many cities have different forms of government
(D) services vary in their locational requirements

19. A person in a large metropolitan community would have easy access to government through all of the following EXCEPT a

(A) city planning agency (B) police station
(C) ward (D) precinct

Questions 20-21 refer to the following hypothetical map.



20. A proposal is made to build a dam at site 3. Which of the following would be involved in the planning process?

I. The federal government
II. A municipal government
III. The United States Army
IV. A state government

(A) I and III only (B) I, II, and IV only
(C) II, III, and IV only (D) I, II, III, and IV

21. Radioactive wastes are polluting the river at site 4. Which of the following levels of government would be involved in seeking an immediate solution to this problem?

I. County
II. Municipal
III. Federal
IV. State

(A) I and IV only (B) I, II, and IV only
(C) II, III, and IV only (D) I, II, III, and IV

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22. The people of Brazil changed their capital city for all of the following reasons EXCEPT to

(A) help populate sparsely settled regions of the country
(B) create a capital city that was more centrally located
(C) encourage new styles of national architecture
(D) build a "dream city"

23. All of the following are important indications of political differences that exist among regions EXCEPT

(A) local newspapers (B) local customs
(C) political speeches (D) election results

24. All of the following statements about boundaries are correct EXCEPT:

(A) They hinder the exchange of ideas.
(B) They increase trade between countries.
(C) They contribute to a sense of nationalism.
(D) They limit political territory.

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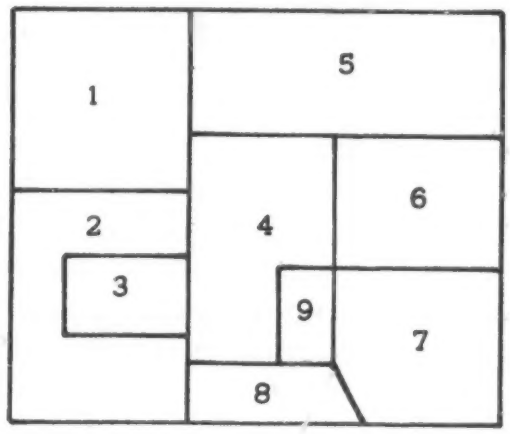
Questions 25-27 refer to the election districts in the following map of an imaginary state.



The table below refers to the population and number of representatives for three of the election districts shown above.

District	Population		Representatives	
	1860	1960	1860	1960
1	5,000	15,000	5	5
4	4,000	8,000	4	4
8	4,000	3,000	5	3

25. Which of the following districts, as shown on the map, was probably gerrymandered?

(A) 2 (B) 5 (C) 6 (D) 7

26. Which of the following districts was overrepresented in 1860 ?

(A) 1 (B) 4 (C) 8
(D) It cannot be determined from the information given.

27. Which of the following districts was most seriously underrepresented in 1960 ?

(A) 1 (B) 4 (C) 8
(D) It cannot be determined from the information given.

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28. In the reading on Hawaii, the way in which the political map is redrawn will influence the

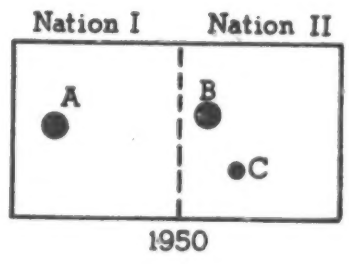
(A) representation of pineapple pickers
(B) voting behavior of laborers
(C) political attitudes of hotel owners
(D) number of political parties

29. Most boundary disputes are settled by

(A) aggression and warfare
(B) compromise and arbitration
(C) annexation
(D) world court decisions

30. Which of the following is LEAST likely to be a boundary between states or countries?

(A) A river (B) A mountain range
(C) A major highway (D) A coastline



31. The diagrams above show that the boundary between Nation I and Nation II was changed in 1965. The boundary change did not affect City A, but City B by becoming a part of Nation I was separated from its satellite, City C. Which of the following would most likely occur as a result of this change in boundary?

I. People in City A would travel less often to City C.
II. Some workers from City C would lose their jobs.
III. City C would develop more specialized services.
IV. City A would gain shoppers from its rural area.

(A) I and II only
(B) II and III only
(C) I, III, and IV only
(D) II, III, and IV only

32. In the reading "Territoriality and Human Behavior in a Modern Office," the change in territory resulted in all of the following EXCEPT

(A) more direct supervision
(B) loss of morale
(C) greater efficiency
(D) less authority for Miss Dunn

GO ON TO THE NEXT PAGE.

33. The Ojibwa Indians showed all of the following characteristics EXCEPT

(A) residential isolation
(B) movement from place to place
(C) a decentralized political system
(D) communal hunting and fishing

34. Which of the following is LEAST likely to cause disputes among the townships in a county?

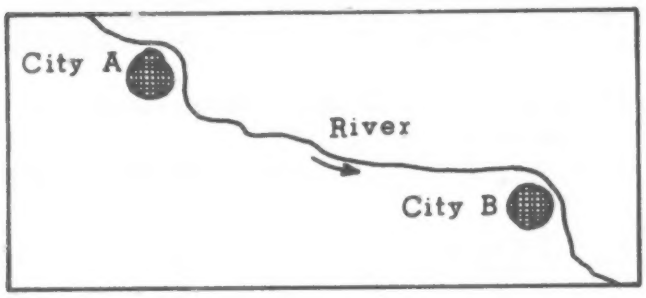
(A) Location of a county hospital
(B) Boundary claims
(C) Site for a new airport
(D) Site for a new elementary school

35. All of the following were reasons for the abolition of counties in Connecticut EXCEPT

(A) improved transportation
(B) growth of cities
(C) poor conditions of county schools
(D) disturbances in county jails

36. Population growth and economic changes in the United States during the last fifty years have resulted in all of the following EXCEPT

(A) metropolitan governments (B) counties
(C) special districts (D) regional planning units



37. The residents of City B probably would be most concerned with which of the following activities of City A ?

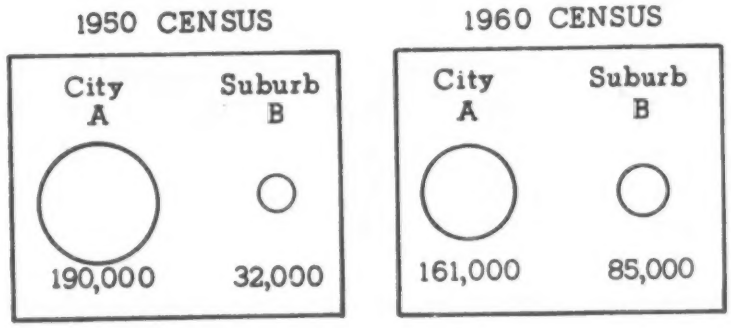
(A) Transportation
(B) Police protection
(C) Sewage disposal
(D) Tax collection

38. Through Senator Smith's influence in the state legislature, a site in City X is chosen for the new state university. As a result, Senator Smith will probably gain increased support from all of the following groups in City X EXCEPT the

(A) parents of adolescents
(B) police department
(C) merchants
(D) unemployed workers

39. The most probable result of increasing the size and decreasing the number of wards in a city would be

(A) less representation for ethnic groups
(B) less responsibility for ward leaders
(C) more contact between citizens and their local government
(D) more representation for neighborhoods



40. During the decade 1950-1960, City A decreased in population and Suburb B increased, as illustrated in the diagram above. Which two of the following were the likely results of this change?

I. An increase in political power for Suburb B and a decrease in economic activity for City A
II. An increase in economic activity for Suburb B and an increase in political power for City A
III. A decrease in political power for City A and a decrease in economic activity for Suburb B
IV. An increase in economic activity for Suburb B and a decrease in political power for City A

(A) I and II
(B) I and IV
(C) II and III
(D) III and IV

GO ON TO THE NEXT PAGE.

41. Which of the following statements about political boundaries is most accurate?

(A) Boundaries that are based on natural features are seldom disputed.
(B) Boundaries are part of the political systems they separate.
(C) Boundaries determine the amount of international trade.
(D) The functions of boundaries remain constant.

42. The removal of a boundary between two countries would be hardest on a

(A) smuggler (B) policeman
(C) tourist (D) merchant

43. All of the following would be useful reference sources for creating a political map of the world EXCEPT

(A) The Stateman's Yearbook
(B) The Encyclopedia of Nations
(C) The Farmer's Almanac
(D) The Atlas of Economic Development

44. All of the following participated in the hypothetical boundary dispute between the United States and Canada EXCEPT

(A) the United Nations
(B) an arbitration committee
(C) a gold company
(D) the International Joint Commission

45. Which of the following characteristics is LEAST useful in creating a world political map?

(A) Status of political sovereignty
(B) Orientation of foreign policy
(C) Type of government
(D) Type of judicial system

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST.

END